

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Comparative evaluation of the response rate based on tricoscopic criteria in patients with severe alopecia areata treated with diphenylcyprone with or without intralesional platelet rich plasma

Protocol summary

Study aim

Comparative evaluation of response to treatment based on trichoscopic criteria in patients with severe alopecia areata treated with diphenylcyprone with and without intralesional platelet rich plasma injection

Design

A clinical trial with 20 sample size of patient with severe alopecia areata. Every patient is their own control single groups, double blinded and randomized (Random block)

Settings and conduct

Patients are selected from referrals to Diphenylcyprone Clinic at Department of Dermatology, Razi Hospital. The test was performed with 2% diphenylcyprone solution and continues based on routine protocols for whole scalp. after reaching the appropriate concentration, PRP injection sessions begin on one side of the scalp. Randomized block method was used to randomize treatments to the head sides (left and right). Inject 3 sessions at one month interval. The study is double-blinded (Participant, Outcome assessor and data analyser are blinded and Care provider (Investigator) are aware)

Participants/Inclusion and exclusion criteria

Inclusion 1. Patients with severe alopecia areata (> 50% scalp and less than 100%) 2. Positive response to test with 2% Diphenylcyprone solution exclusion 1. alopecia totalis/universalis 2. Receiving systemic treatment in the past 6 months 3. Children under 18 years 4. Pregnant and lactating women 5. Immunosuppressants 6. People with platelet dysfunction 7. Taking intralesional steroid over the last month 8. Fever, systemic and topical infection at the injection site

Intervention groups

All patients receive the intervention, which is the injection of platelet-rich plasma (PRP). Every person is their own control. the whole scalp takes Diphenylcyprone and only one side (right or left) takes PRP.

Main outcome variables

Patients with severe alopecia areata respond more significantly to treatment with PRP and diphenylcyprone together in comparison with diphenylcyprone alone

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200130046311N1**

Registration date: **2021-04-13, 1400/01/24**

Registration timing: **retrospective**

Last update: **2021-04-13, 1400/01/24**

Update count: **0**

Registration date

2021-04-13, 1400/01/24

Registrant information

Name

azadeh rezayat

Name of organization / entity

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-02-29, 1398/12/10

Expected recruitment end date

2021-01-19, 1399/10/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparative evaluation of the response rate based on tricoscopic criteria in patients with severe alopecia areata treated with diphencyprone with or without intralesional platelet rich plasma

Public title

Comparison of the effect of DiphenCiprone alone and DiphenCiprone with intralesional injection of platelet-rich plasma in alopecia areata

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

A patient with alopecia areata whose definitive diagnosis was made on clinical or histological basis and their involvement was severe (> 50% scalp area and less than 100%). Positive response to test with 2% Diphen Ciprone solution

Exclusion criteria:

Patients with alopecia totalis or universalis Receive any systemic treatment during the last 6 months Children under 18 years Pregnant and lactating women Immunosuppressed patient patient with platelet dysfunction patient with a history of injecting steroids on the site over the past month Fever, systemic infection and local infection at the injection site

Age

From **18 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant
- Outcome assessor
- Data analyser
- Data and Safety Monitoring Board

Sample size

Target sample size: **20**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomized block method was used to randomize treatments to the two different head area(left and right). Blocks in the size of 2 and 4 were used to generate random blocks

Blinding (investigator's opinion)

Double blinded

Blinding description

Patients participating in the study were unaware of which side of the scalp received PRP and which side the placebo. The care provider , who is also the investigator, is aware of this. People who analyze photographic images to determine SALT and dermoscopic images are unaware. The statistical consultant for data analysis is

also unaware.

Placebo

Used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of Tehran University of Medical Sciences

Street address

Building No. 1 - Enghelab Ave. - Qods Street - Porsina Street - North Door of the University Tehran, Iran

City

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Province

Tehran

Postal code

1417653761

Approval date

2019-09-20, 1398/06/29

Ethics committee reference number

IR.TUMS.MEDICINE.REC.1398.505

Health conditions studied**1****Description of health condition studied**

Alopecia areata

ICD-10 code

L63.8

ICD-10 code description

Other alopecia areata

Primary outcomes**1****Description**

severity alopecia tool score (SALT score)

Timepoint

Trichoscopic evaluation at baseline, 3 months later, 6 months later

Method of measurement

Trichoscope

Secondary outcomes**1****Description**

SALT score evaluation
Timepoint
Evaluation at baseline, 3 months later, 6 months later
Method of measurement
visual evaluation

Intervention groups

- 1
- Description**
Intervention group: taking Diphen Cyprone and platelet-rich plasma together. All patients participating in the study received diphen cyprone and PRP simultaneously on one side of their head (right or left randomized). Patients who respond positively to 2% diphen cyprone solution enter the next stages of treatment, starting with 0.0001% solution. After this, the patient goes to the Diphen Cypron clinic every one to two weeks and based on the patient's symptoms and the discretion of the physician, the treatment is continued with a gradual increase in the drug concentration. PRP injection is started as soon as the appropriate concentration of diphen cyprone is reached for each patient (causing mild, tolerable itching, scaling, and erythema). PRP injection is done with a one-month interval of 3 sessions.
- Category**
Treatment - Other
- 2
- Description**
Control group: Each person is his own control. This means that the opposite side of the head (right or left) is treated with topically Diphen cyprone and placebo injection. Its frequency and dose are completely in accordance with the intervention group
- Category**
Treatment - Other

Recruitment centers

- 1
- Recruitment center**
- Name of recruitment center**
Razi dermatology hospital
- Full name of responsible person**
Azadeh Rezayat
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Sponsors / Funding sources

- 1
- Sponsor**
- Name of organization / entity**
Tehran University of Medical Sciences
- Full name of responsible person**
Mohammad Ali Sahraian
- Street address**
Deputy of research and technology, Central University Organization, Sixth Floor, Ghods Ave., Keshavarz Blvd.
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vcr@tums.ac.ir
- Grant name**
- Grant code / Reference number**
- Is the source of funding the same sponsor organization/entity?**
Yes
- Title of funding source**
Tehran University of Medical Sciences
- Proportion provided by this source**
100
- Public or private sector**
Public
- Domestic or foreign origin**
Domestic
- Category of foreign source of funding**
empty
- Country of origin**
- Type of organization providing the funding**
Academic

Person responsible for general inquiries

- Contact**
- Name of organization / entity**
Tehran University of Medical Sciences
- Full name of responsible person**
Azadeh Rezayat
- Position**
Resident
- Latest degree**
Specialist
- Other areas of specialty/work**
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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to
make this available

Statistical Analysis Plan

Not applicable

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to
make this available

Data Dictionary

Not applicable

Title and more details about the data/document

All data can be shared

When the data will become available and for how long

after the end of study

To whom data/document is available

Researchers working in academic and scientific
institutions

Under which criteria data/document could be used

For research and study

From where data/document is obtainable

first responsible of the study

What processes are involved for a request to access data/document

Send a request to responsible

Comments